

# CI 512 - Teaching and Learning

July  
19

\* Notes  
for this  
day by  
Chad

## Introductions:

Carolyn - Math Dept at PSU - Freshman in high school  
did kinesthetic x, y coordinate activity

Kyle - Math - 10 years to get bachelors and was  
proud to send picture of diploma to mom

Nick - Math - explaining an idea helped to  
learn and you could see the epiphany in the other

Casey - Math/Physics - teaching lessons during practicum,  
likes to get students to reinvent the wheel  
so that they learn it better

Chad - Physics - structural engineer for 10 years -  
remembers learning fractions with licorice  
in 4th grade

Karen - Math - 6 years as systems engineer -  
taught swim lessons as a teen, remembers  
a kid that was afraid to jump off the board  
but finally did and was so happy (and kept jumping)

Laura - Math / middle school - stay at home mom  
- went back to basics and changed kids  
from passing to failing

Mike P. - Math - 2nd grade the teacher brought  
a box full of kittens and let them  
run around the classroom

Sean - Math - taught kids<sup>th</sup> with rope and chalk on the playground

Carlos - Math / Spanish - 2 year long math program, cohort style, still ~~has~~ good memories

Colin - Math / Computer Sci - TA'd in a computer science class

Greg - Math - remembers getting a star by your name when memorizing the times tables

Mike M. - Math - 3rd grade, solar system, when you read 100 pages you got to move your space ship

Arielle - Biology - sat with special ed. child and got him to finish his homework

Mike T. - Chemistry - when grandfather turned 90 he was with his 10 year old nephew and equated years to steps to show him the scale

Michael - Biology / Chemistry - dissected a dead sea lion in college lab, it was really interesting

Westie - Math - right before Xmas break there was a big spelling test and as a reward the teacher brought in Santa

Martin - Martin - 5<sup>th</sup> grade had a mean, male teacher who turned out to be nicer, Martin did multiplication tables by adding until the teacher offered the reward of going to recess early

Chai - Math / middle school - Korean education is more rigorous and less active, no interaction only study, remembers using a song to remember a math formula as taught by a middle school teacher

Derek - Math / Business - 8<sup>th</sup> grade social studies, got to be a labor boss in a simulation and liked the power

Iman - Chemistry - teaching 4<sup>th</sup> graders Arabic grammar, case endings depends on position of words in sentence, students finally got it

Teale - Math - tutored 4<sup>th</sup> graders, taught them the trick for remembering the 9s times tables

## Communities Standards:

| Key: |         |
|------|---------|
| •    | Goals   |
| -    | Methods |

- |  |  |
|--|--|
| • Broaden our views  | - exposure to many views   |
| • Active Participation   | - small group discussions  |
| • Respectful   | - constructive criticism   |
| • Have fun   | - do unto others ...   |
| • Team building  | - come to class prepared   |
| • Include everybody  | - one person at a time   |
| • Everyone feel comfortable  | - allow time for reflection  |
| • Voluntary participation/<br>let slower one's have<br>a chance to speak | - moderate discussions   |
| • Explore different<br>perspectives                                      | - wrap-up / debrief each day   |
| • Share personal accounts  | - recognize when you state an<br>opinion, use "I believe / think..." |
| • Balance between structure<br>and free flowing                          | - time limit on answers  |
| • Everybody engage   | - use examples not philosophy  |
|  | - no need to raise hands   |
|  | - move on when topic exhausted                                       |
|  | - keep it lively / engaging  |

## Quotes by Bell Hooks: (feminist author)

"Engaged pedagogy emphasizes mutual participation..."

"In an engaged classroom students learn the value of speaking and dialogue ..."

Active silence = pause to think  
before one speaks

Class goal : to learn the many theories of teaching and learning and use them to form our own

### Discuss the reading:

Why are there multiple theories on learning?

- there are many types of learning
- different researchers in different fields
- there are different value structures

Why do we study theory?

- in order to be adaptable as a teacher
- to teach to different students needs
- different lessons require different learning schemes
- using the theory that a student needs may provide motivation for them to learn more

Theory = idea based on previous knowledge

Why study? To gain a broad foundation of knowledge built by "colleagues" who have devoted their lives to the improvement of teaching/learning

- \* Form your own theory
- \* Choose teaching methods intentionally
- \* Defend methods with informed rationale